European Marine Biodiversity Research Sites

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MECKLENBURG BIGHT, SOUTHWESTERN BALTIC SEA

Description of site:
In the Mecklenburg Bight, high saline North Sea water mixes with Baltic Sea water, which usually has a lower salinity due to the strong freshwater input from the Baltic Sea catchment area. Almost all habitats, available in the Baltic Sea, are present. Both the changes in habitat on a relatively small scale and the natural salinity gradients are desirable features for biodiversity studies in the Baltic Sea.

Description of fauna and flora:
The Mecklenburg Bight host more than 350 macrobenthic taxa. It forms a natural border regarding the distribution of many marine benthic species and as a consequence species number is higher than in adjacent areas to the east or in the Baltic Proper. Biodiversity in the Mecklenburg Bight is representative for the whole southern Baltic Sea.

Human impact:
Compared to other parts of the Baltic, industrial pollution, mining, dumping or dredging, is not very pronounced. Mecklenburg Bight has a few hot spots in regard to wastewater in the Lübeck and Wismar area. Potentially harmful agricultural runoff is found in some areas.

Facilities:
The distance from the Bight to the nearest fully equipped marine research laboratories, Baltic Sea Research Institute in Warnemünde (ICW), is about 50 km. The ICW has two research vessels and offers a limited number of rooms for guest researchers.

Available database and website:
More than 21,000 records on macrobenthic species are incorporated in the ICW database, and phyto- and zooplankton data are obtainable via the MUDAB database at the Bundesamt für Seeschifffahrt und Hydrographie (BSH). Respective websites are www.io-warnemuende.de and http://www.bsh.de

Commitment and ongoing research:
The Baltic Sea Research Institute has an adopted science plan devoted to biodiversity related research and has allocated a budget for biodiversity work. The Institute also performs regular monitoring surveys in the Mecklenburg Bight.